

IN THE CLAIMS:

- 1 1. (CURRENTLY AMENDED) A method for providing request compatibility in
2 a multicast system, said method comprising:
- 3 receiving, by a layer 2 switch coupled between a group of receivers and a
4 router, requests for traffic from said group of receivers;
- 5 | determining, by said layer 2 switch, whether said traffic requests contain
6 incompatible request types;
- 7 if incompatible request types exist, then separating said traffic requests
8 into at least two groups based on type;
- 9 | creating a first host identity at said layer 2 switch associated with a first
10 address available to said layer 2 switch;
- 11 | creating a second host identity at said layer 2 switch associated with a sec-
12 ond address available to said layer 2 switch; and
- 13 | sending requests of a first group of said at least two groups from said first
14 host identity of said layer 2 switch ~~different types~~ to said router, and sending re-
15 quests of a second group of said at least two groups from said second host identity
16 of said layer 2 switch to said router ~~from different addresses of the layer 2 switch,~~
17 to present an appearance to said router that the requests of different types are from
18 different hosts.
- 1 2. (ORIGINAL) The method of claim 1, wherein said incompatible request types include
2 a single-source request and an any-source request.
- 1 3. (ORIGINAL) The method of claim 2, wherein said single-source request comprises an
2 IGMP v3 request.

1 4. (PREVIOUSLY PRESENTED) The method of claim 2, wherein said any-source re-
2 quest comprises an IGMP v2 request.

1 5. (ORIGINAL) The method of claim 1, wherein said incompatible request types include
2 an include request and an exclude request.

1 6. (CURRENTLY AMENDED) The method of claim 1, wherein said first address avail-
2 able to said layer 2 switch is ~~act of sending requests of different types to said router from~~
3 ~~different addresses further comprises: creating a first host identity located at a first MAC~~
4 ~~address; and said second address available to said layer 2 switch is creating a second host~~
5 ~~identity located at a second MAC address.~~

1 7. (CANCELLED)

1 8. (CURRENTLY AMENDED) An apparatus for providing request compatibility in a
2 multicast system, said apparatus comprising:

3 a layer 2 switch coupled between a group of receivers and a router;

4 said layer 2 switch configured to:

5 receive requests for traffic from said group of receivers;

6 determine whether said traffic requests contain incompatible request types;

7 separate said traffic requests into at least two groups based on type if in-
8 compatible request types exist;

9 create a first host identity associated with a first address available
10 to said layer 2 switch;

11 create a second host identity associated with a second address available to
12 said layer 2 switch; and
13 send requests of a first group of said at least two groups from said first
14 host identity ~~said requests of different types to said router and send requests of a~~
15 second group of said at least two groups from said second host identity to said
16 ~~router from different addresses of the layer 2 switch,~~ to present an appearance to
17 said router that the requests of different types are from different hosts.

1 9. (ORIGINAL) The apparatus of claim 8, wherein said incompatible request types in-
2 clude a single-source request and an any-source request.

1 10. (ORIGINAL) The apparatus of claim 9, wherein said single-source request comprises
2 an IGMP v3 request.

1 11. (PREVIOUSLY PRESENTED) The apparatus of claim 9, wherein said any-source
2 request comprises an IGMP v2 request.

1 12. (ORIGINAL) The apparatus of claim 8, wherein said incompatible request types in-
2 clude an include request and an exclude request.

1 13. (CURRENTLY AMENDED) The apparatus of claim 8, wherein said first address
2 available to said layer 2 switch is further configured to create a first host identity located
3 ~~at a first MAC address; and said second address available to said layer 2 switch is create~~
4 ~~a second host identity located at a second MAC address.~~

1 14. (CANCELLED)

1 15. (CURRENTLY AMENDED) An apparatus for providing request compatibility in a
2 multicast system, said apparatus comprising:

3 means for receiving, at a layer 2 switch coupled between a group of receivers and
4 a router, requests for traffic from said group of receivers;

5 | means for determining, at said layer 2 switch, whether said traffic requests contain
6 incompatible request types;

7 means for separating said traffic requests into at least two groups based on
8 type if incompatible request types exist;

9 | means for creating a first host identity at said layer 2 switch associated
10 with a first address available to said layer 2 switch;

11 | means for creating a second host identity at said layer 2 switch associated with a
12 second address available to said layer 2 switch; and

13 | means for sending requests of a first group of said at least two groups from said
14 first host identity of said layer 2 switch ~~different types to said router, and sending re-~~
15 quests of a second group of said at least two groups from said second host identity of said
16 layer 2 switch to said router ~~from different addresses of the layer 2 switch, to present an~~
17 appearance to said router that the requests of different types are from different hosts.

1 16. (ORIGINAL) The apparatus of claim 15, wherein said incompatible request types in-
2 clude a single-source request and an any-source request.

1 17. (ORIGINAL) The apparatus of claim 16, wherein said single-source request com-
2 prises an IGMP v3 request.

1 18. (PREVIOUSLY PRESENTED) The apparatus of claim 16, wherein said any-source
2 request comprises an IGMP v2 request.

1 19. (ORIGINAL) The apparatus of claim 15, wherein said incompatible request types in-
2 clude an include request and an exclude request.

1 20. (CURRENTLY AMENDED) The apparatus of claim 15, wherein said first address
2 available to said layer 2 switch is further comprising means for creating a first host iden-
3 tity located at a first MAC address; and said second address available to said layer 2
4 switch is means for creating a second host identity located at a second MAC address.

1 21. (CANCELLED)

1 22. (CURRENTLY AMENDED) A program storage device readable by a machine, tan-
2 gibly embodying a program of instructions executable by the machine to perform a
3 method for providing request compatibility in a multicast system, said method compris-
4 ing:

5 receiving, by a layer 2 switch coupled between a group of receivers and a router,
6 requests for traffic from said group of receivers;

7 determining, by said layer 2 switch, whether said traffic requests contain incom-
8 patible request types;

9 if incompatible request types exist, then separating said traffic requests into at
10 least two groups based on type;

11 creating a first host identity at said layer 2 switch associated with a first
12 address available to said layer 2 switch;

13 creating a second host identity at said layer 2 switch associated with a second ad-
14 dress available to said layer 2 switch; and

15 sending requests of a first group of said at least two groups from said first host
16 identity of said layer 2 switch different types to said router, and sending requests of a

17 | second group of said at least two groups from said second host identity of said layer 2
18 | switch to said router~~from different addresses of the layer 2 switch~~, to present an appear-
19 | ance to said router that the requests of different types are from different hosts.

1 23. (ORIGINAL) The device of claim 22, wherein said incompatible request types in-
2 clude a single-source request and an any-source request.

1 24. (ORIGINAL) The device of claim 23, wherein said single-source request comprises
2 an IGMP v3 request.

1 25. (PREVIOUSLY PRESENTED) The device of claim 23, wherein said any-source re-
2 quest comprises an IGMP v2 request.

1 26. (ORIGINAL) The device of claim 22, wherein said incompatible request types in-
2 clude an include request and an exclude request.

1 | 27. (CURRENTLY AMENDED) The device of claim 22, wherein said first address
2 | available to said layer 2 switch is~~act of sending requests of different types to said router~~
3 | ~~from different addresses further comprises: creating a first host identity located at a first~~
4 | ~~MAC address;~~ and said second address available to said layer 2 switch is~~creating a sec-~~
5 | ~~ond host identity located at a second MAC address.~~

1 28. (CANCELLED)

1 29. (CURRENTLY AMENDED) A method comprising:

2 receiving, by a switch coupled between a group of receivers and a router, a plural-
3 ity of Internet Group Multicast Protocol (IGMP) requests;

4 determining, by the switch, that the plurality of IGMP requests include both
5 IGMP requests of a first type and IGMP requests of a second type;

6 separating the plurality of IGMP requests into at least two groups based on their
7 type, a first group to include the IGMP requests of the first type and a second group to
8 include the ~~multicast~~ IGMP requests of the second type; and

9 sending, by the switch, the ~~source-multicast~~ IGMP requests of the first group to
10 the router using a first Media Access Control (MAC) address assigned to the switch and
11 sending ~~source-specific-multicast~~ the IGMP requests of the second group to the router us-
12 ing a second MAC address assigned to the switch, the second MAC address different
13 from the first MAC address, to present an appearance to the router that the IGMP re-
14 quests of the first type and the IGMP requests of the second type are from different hosts.

1 30. (PREVIOUSLY PRESENTED) The method of claim 29, wherein the IGMP requests
2 of the first type are IGMP include requests that request a particular source be included.

1 31. (PREVIOUSLY PRESENTED) The method of claim 29, wherein the IGMP requests
2 of the second type are IGMP exclude requests that request a particular source be ex-
3 cluded.

1 32. (PREVIOUSLY PRESENTED) The method of claim 29, further comprising:
2 separately aggregating, by the router, the IGMP requests of the first type and the
3 IGMP requests of the second type.

1 33. (NEW) A switch comprising:

2 at least one port configured to receive a plurality of Internet Group Multicast Pro-
3 tocol (IGMP) requests;

4 a processor; and

5 a memory storing instructions that, when executed by the processor, determine
6 that the plurality of IGMP requests include both IGMP requests of a first type and IGMP
7 requests of a second type, separate the plurality of IGMP requests into at least two groups
8 based on their type, a first group to include the IGMP requests of the first type and a sec-
9 ond group to include the IGMP requests of the second type, and send the IGMP requests
10 of the first group to a router using a first Media Access Control (MAC) address assigned
11 to the switch and send the IGMP requests of the second group to the router using a sec-
12 ond MAC address assigned to the switch, the second MAC address different from the
13 first MAC address, to present an appearance to the router that the IGMP requests of the
14 first type and the IGMP requests of the second type are from different hosts.

1 34. (NEW) The switch of claim 33, wherein the IGMP requests of the first type are IGMP
2 include requests that request a particular source be included.

1 35. (NEW) The switch of claim 33, wherein the IGMP requests of the second type are
2 IGMP exclude requests that request a particular source be excluded.

1 36. (NEW) The switch of claim 33, wherein the instructions, when executed by the proc-
2 essor, separately aggregate the IGMP requests of the first type and the IGMP requests of
3 the second type.